

2002220" 64E6200T

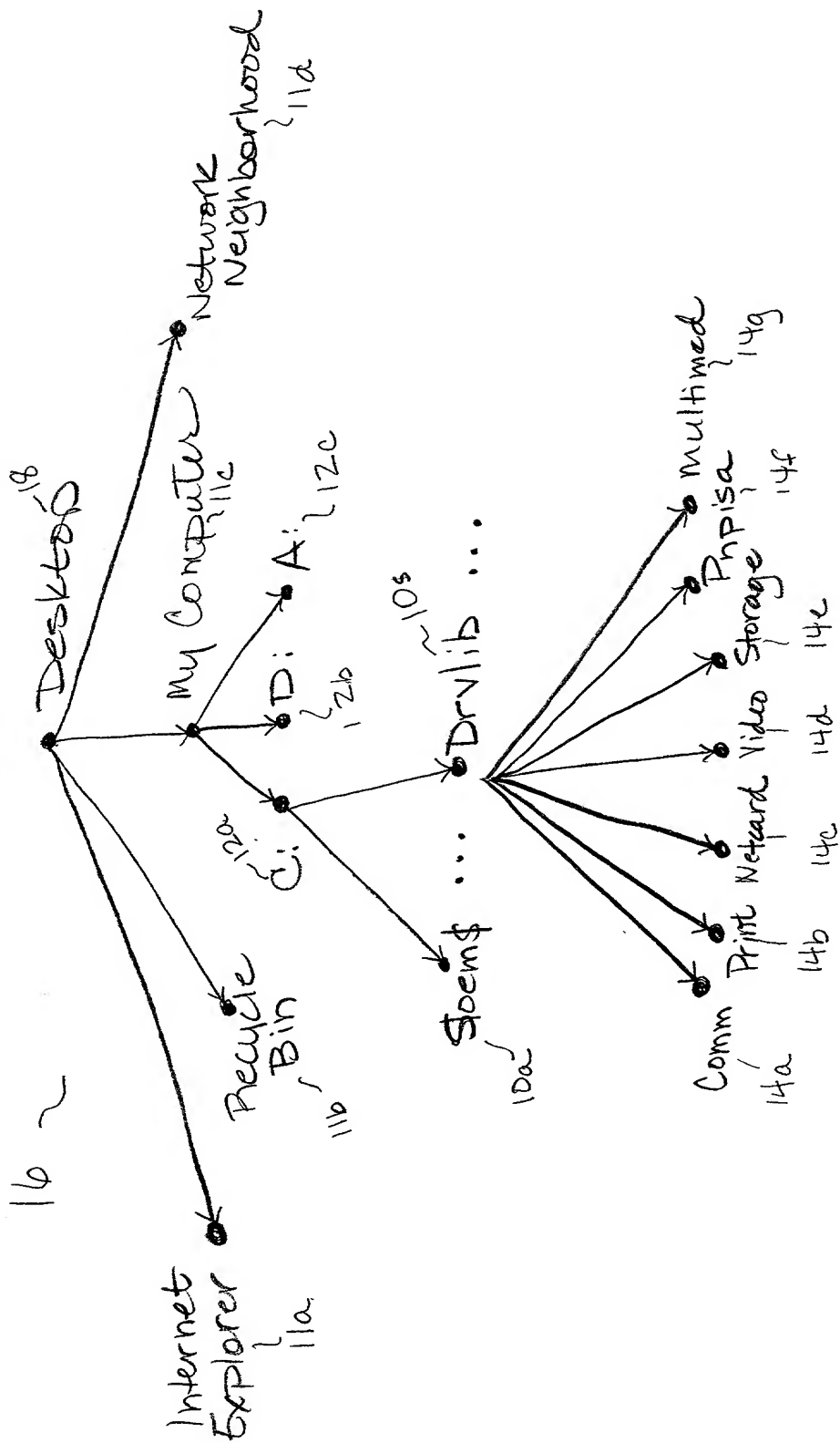


Fig. 1 (prior art)

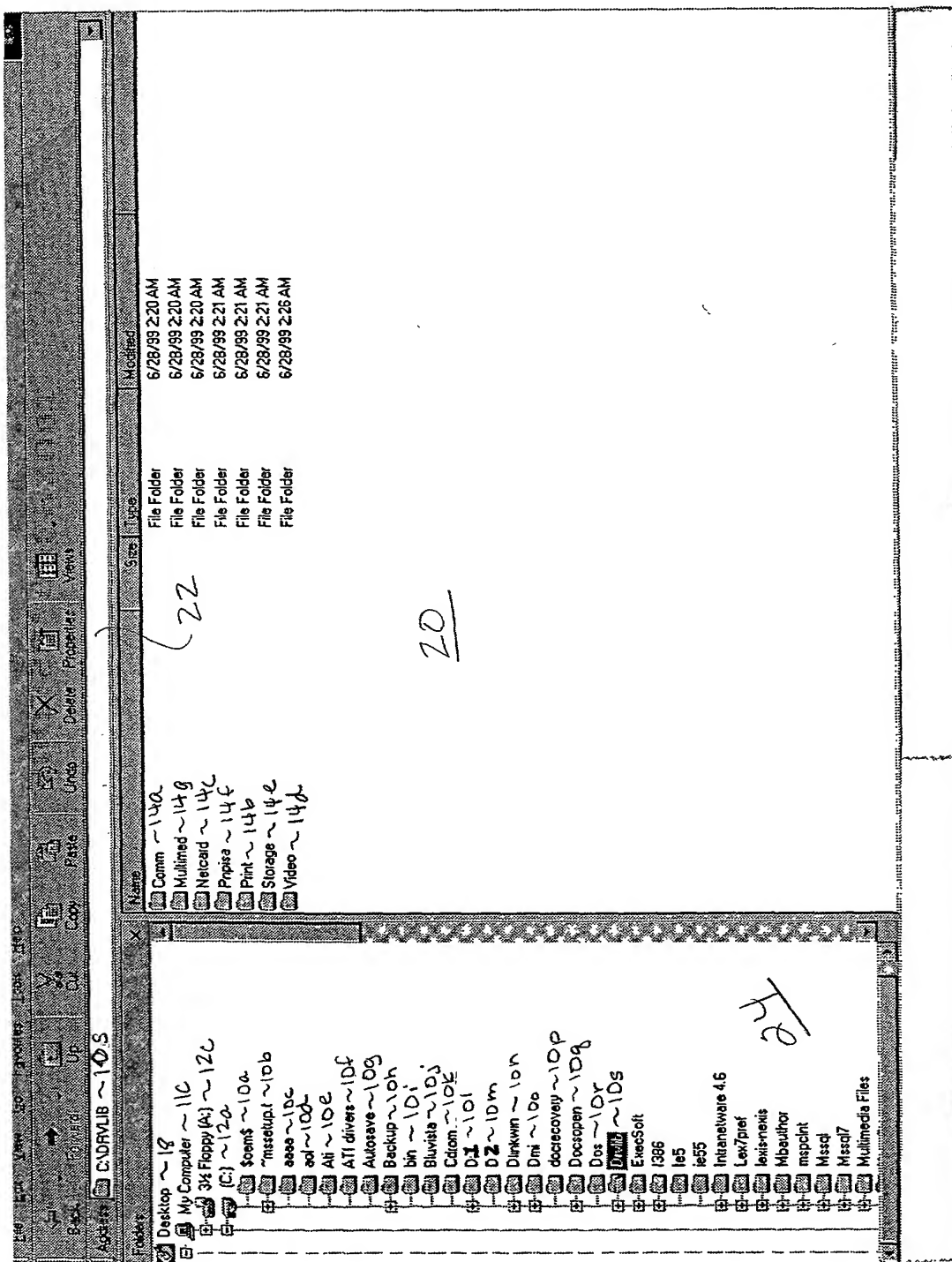


Fig.2 (prior art)

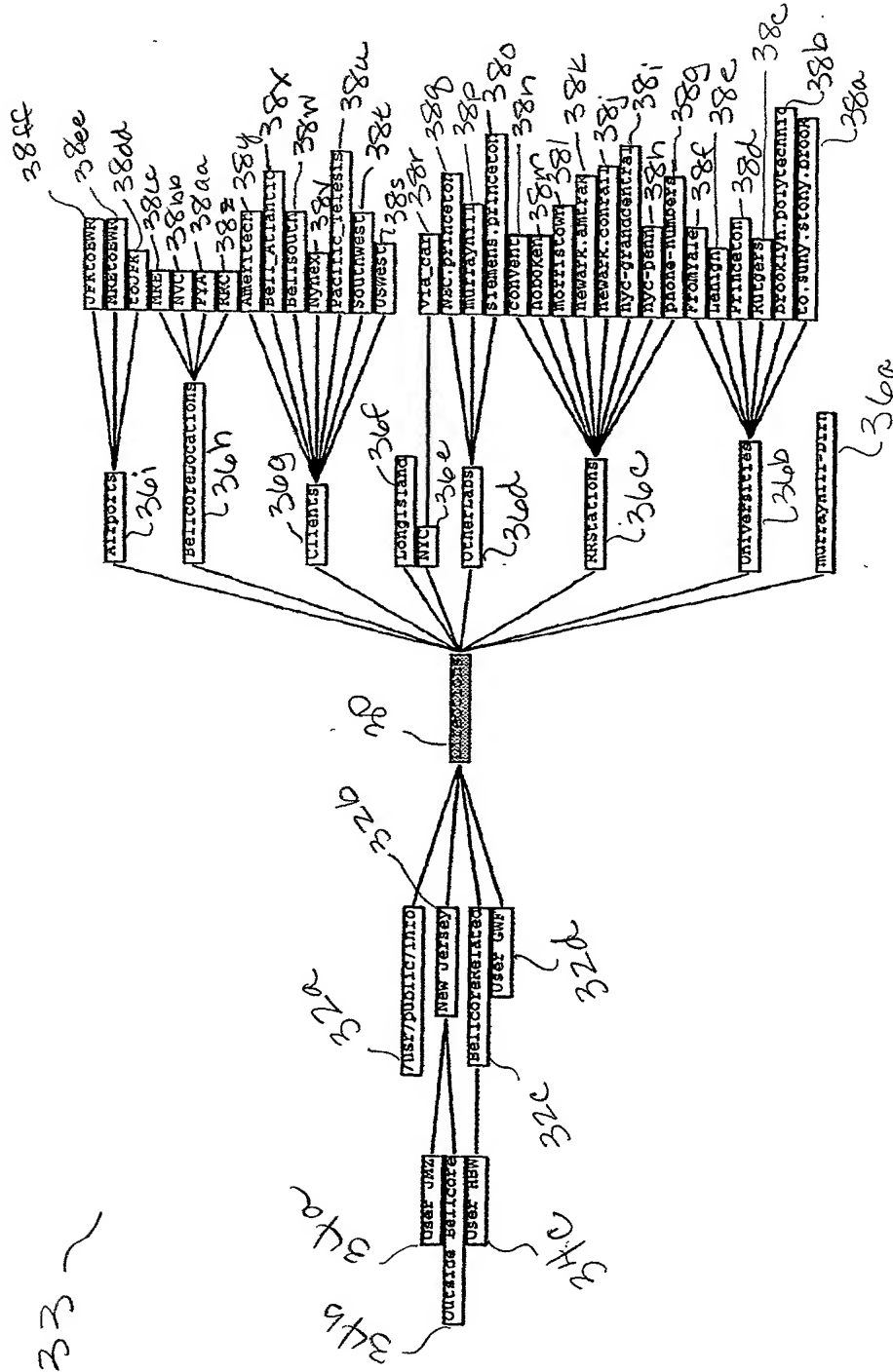


Fig. 3 (prior art)

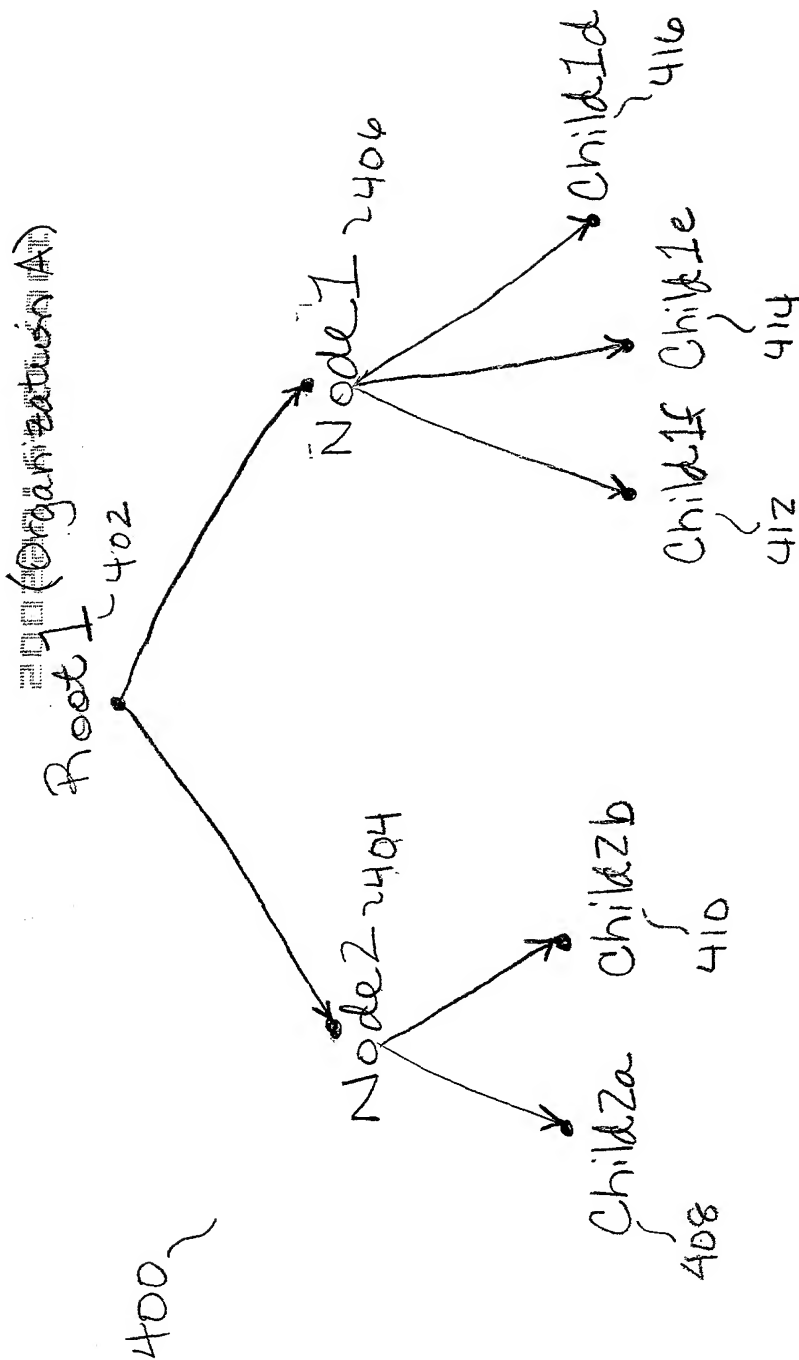


Fig. 4

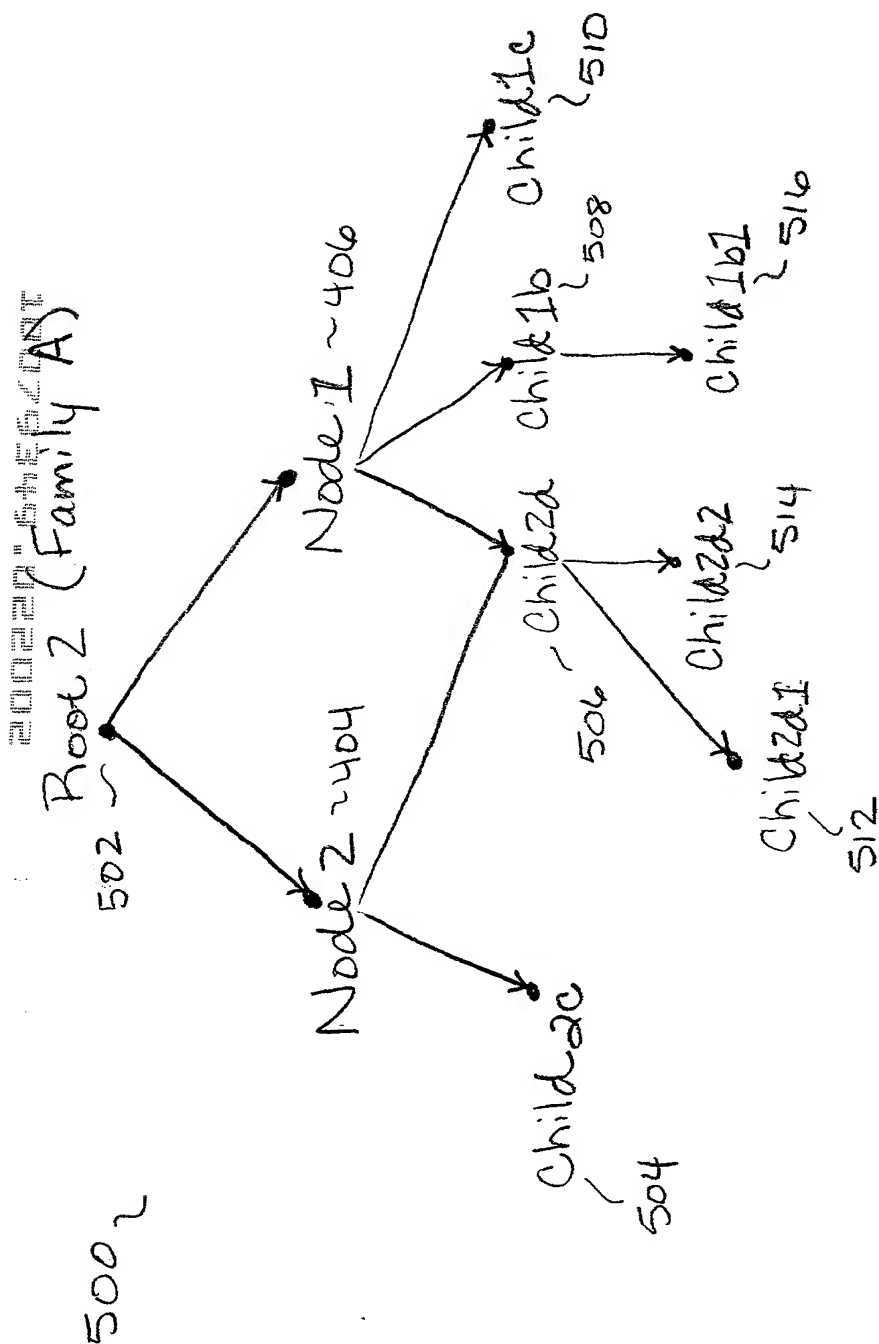


Fig. 5

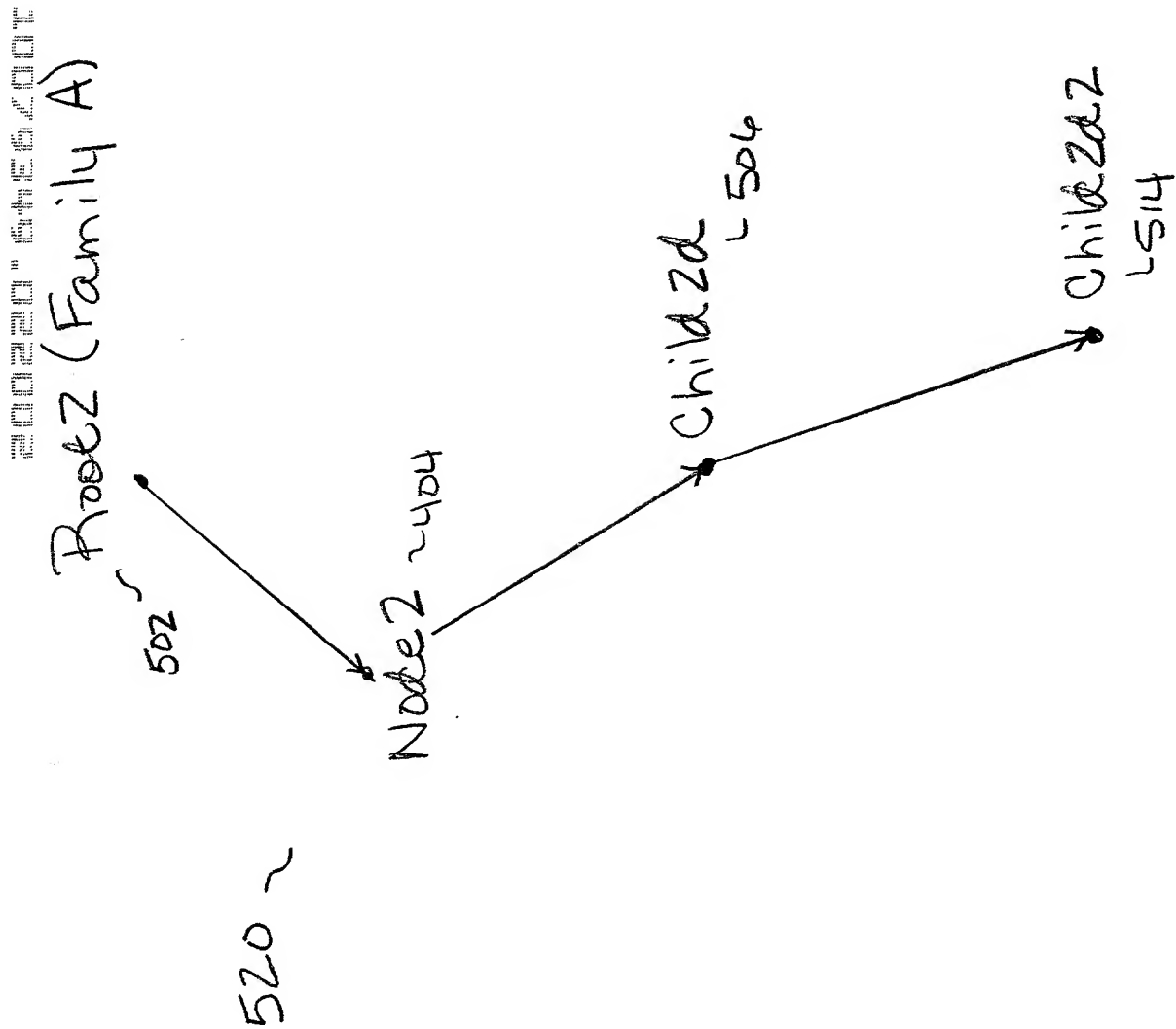


Fig. 5A

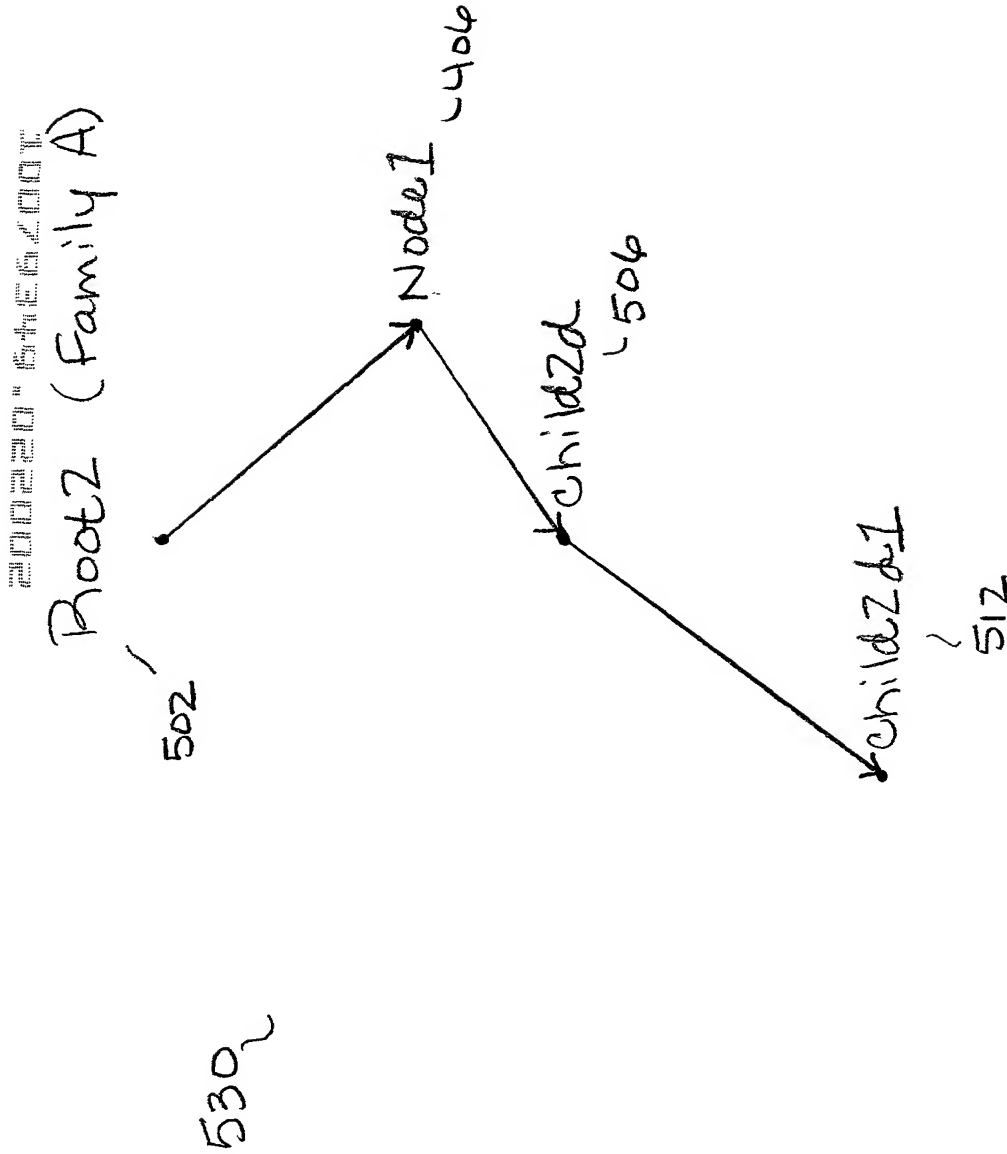


Fig. 5B

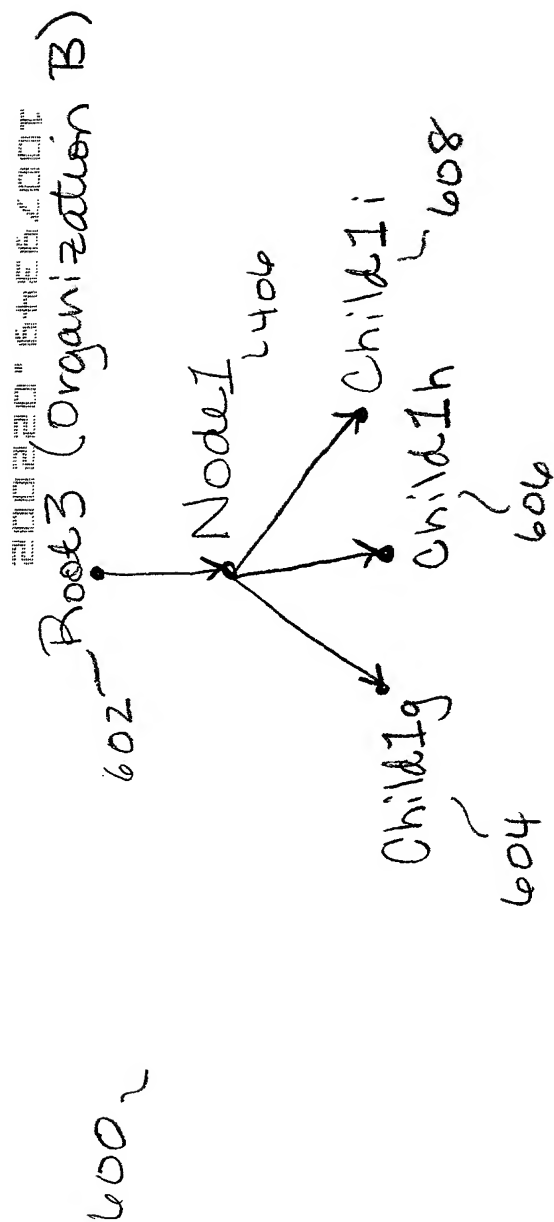


Fig. 6

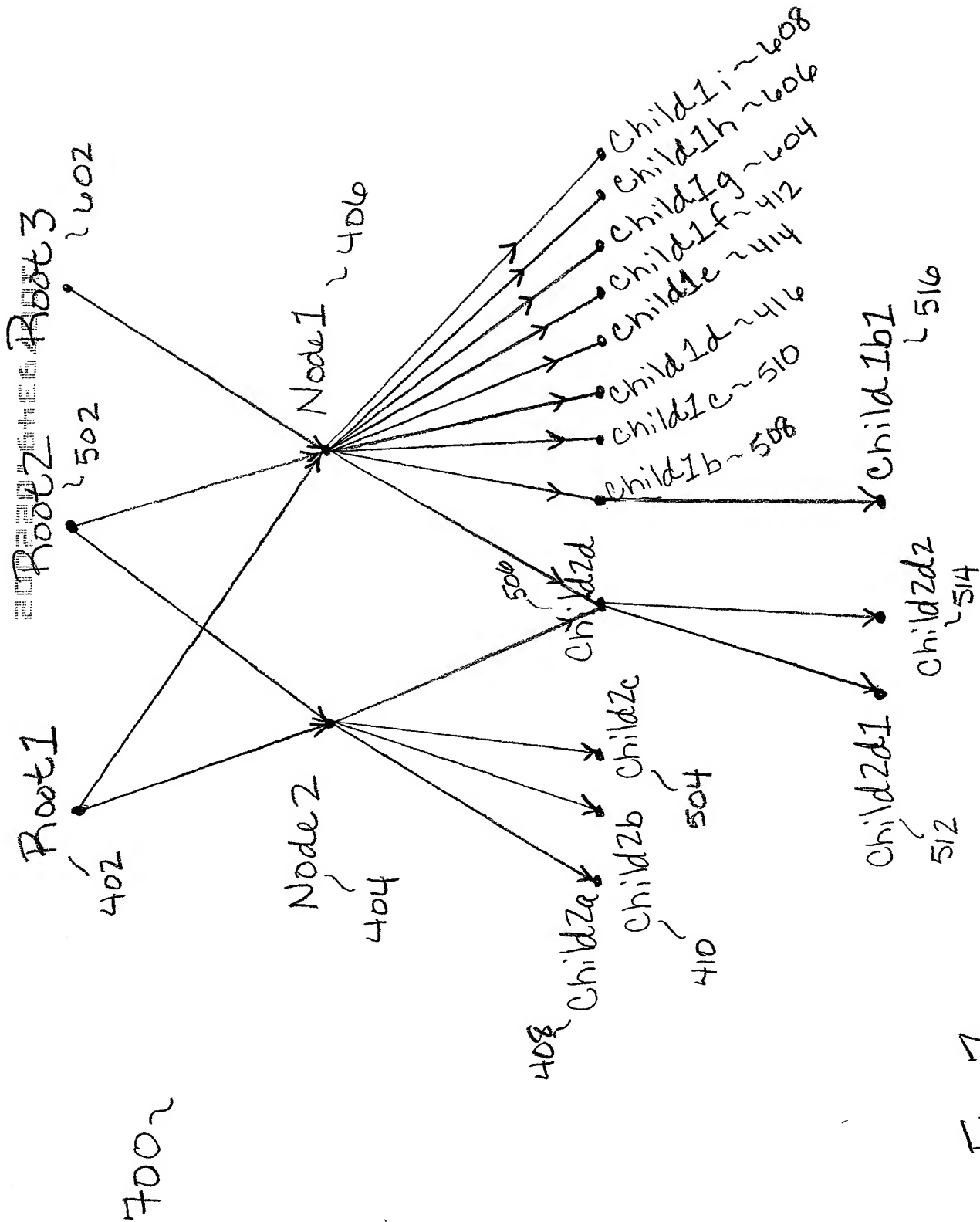


Fig. 7

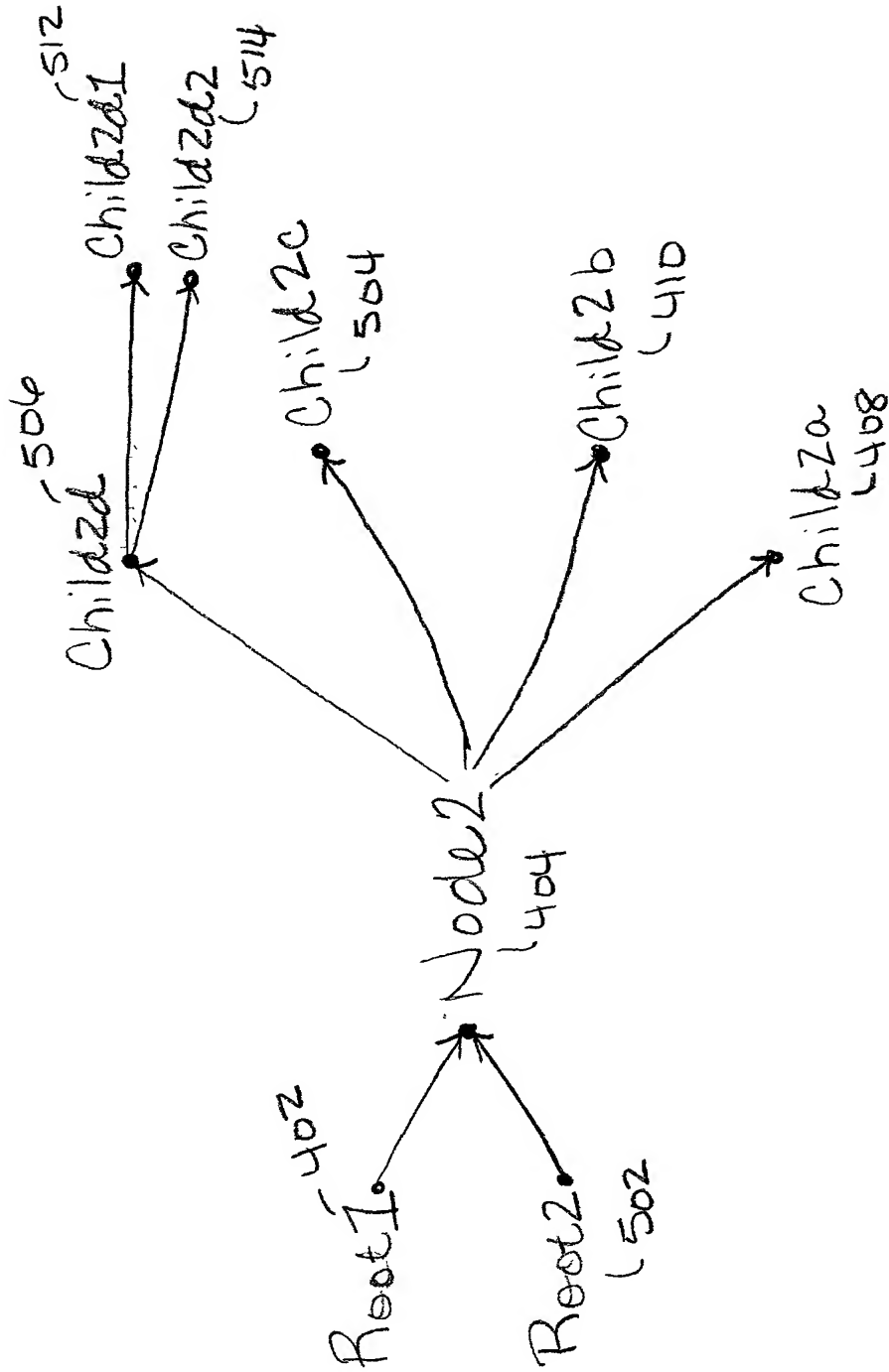


Fig.8 (prior art)

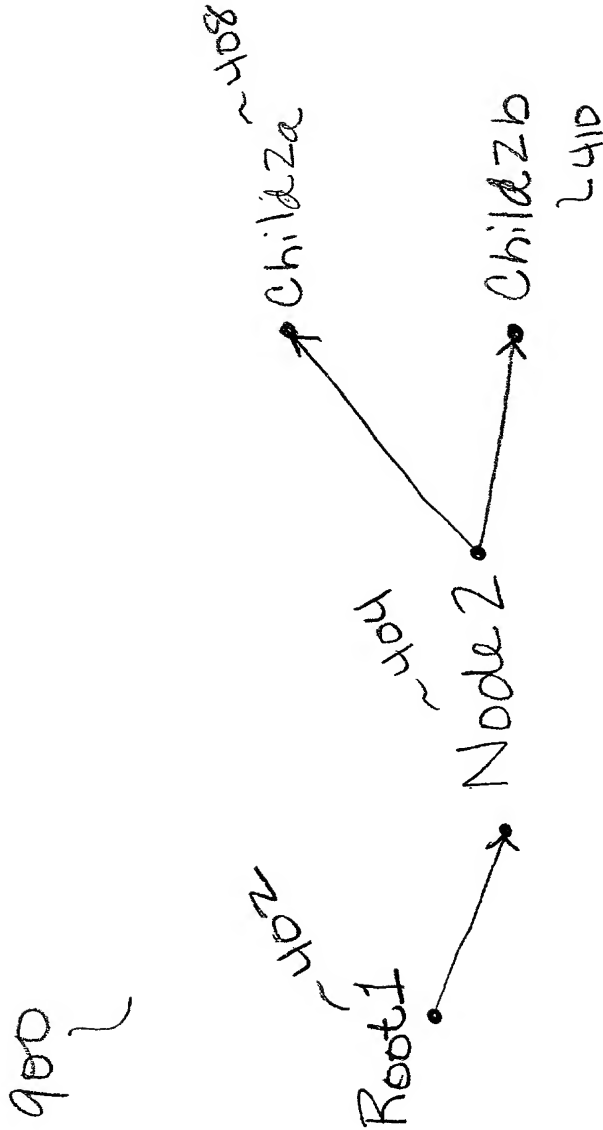


Fig. 9

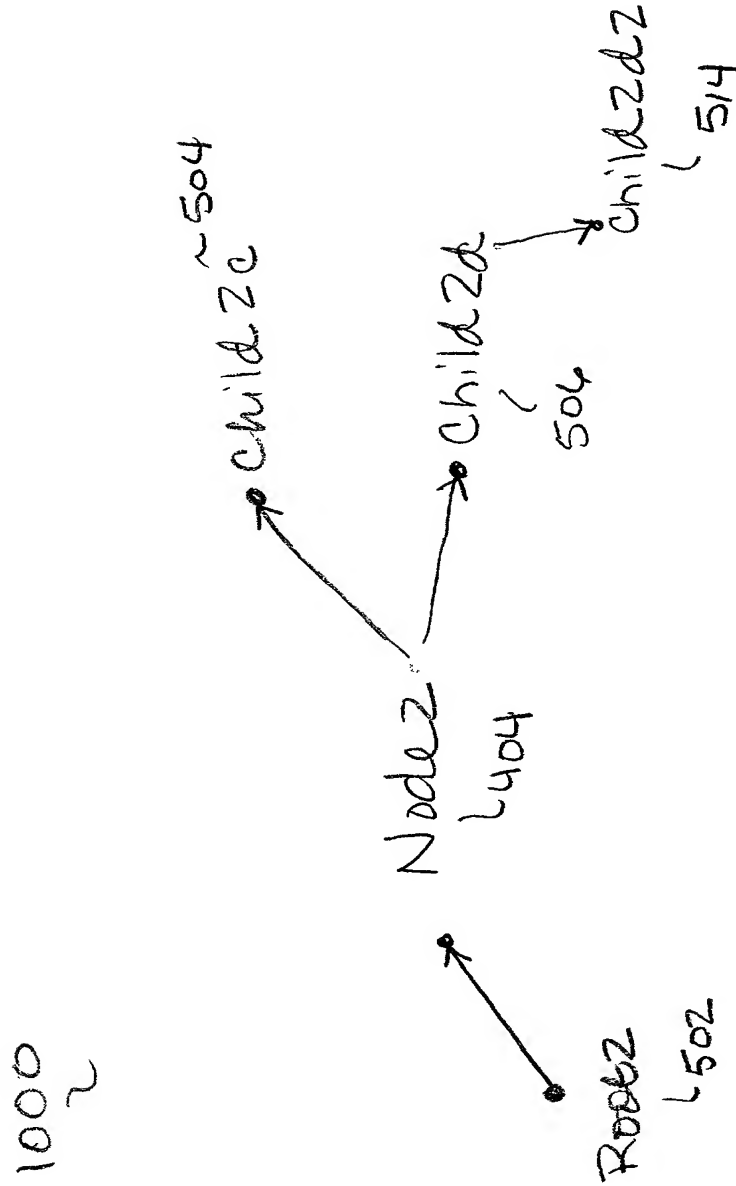


Fig. 10

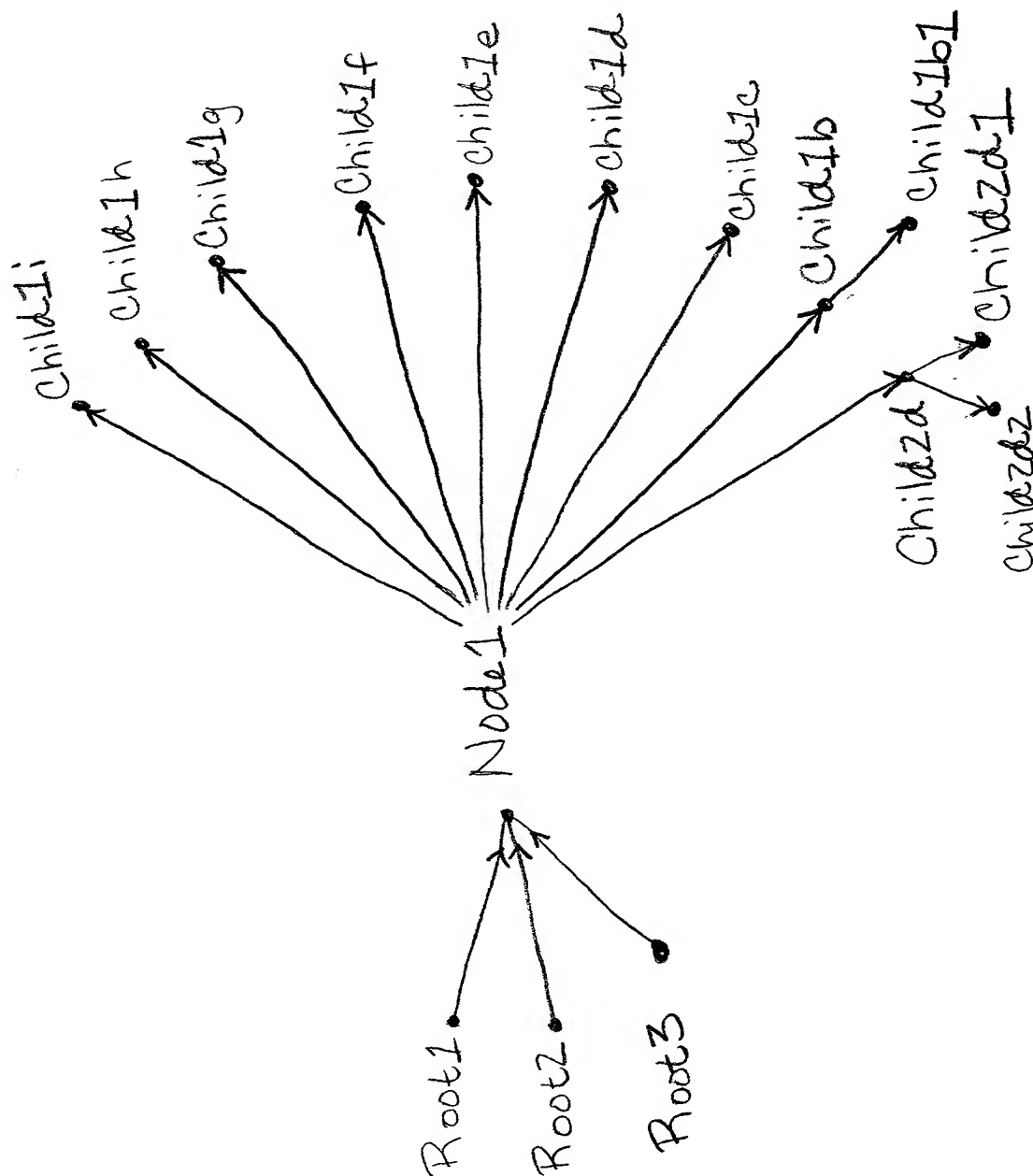


Fig. 11. (prior art)

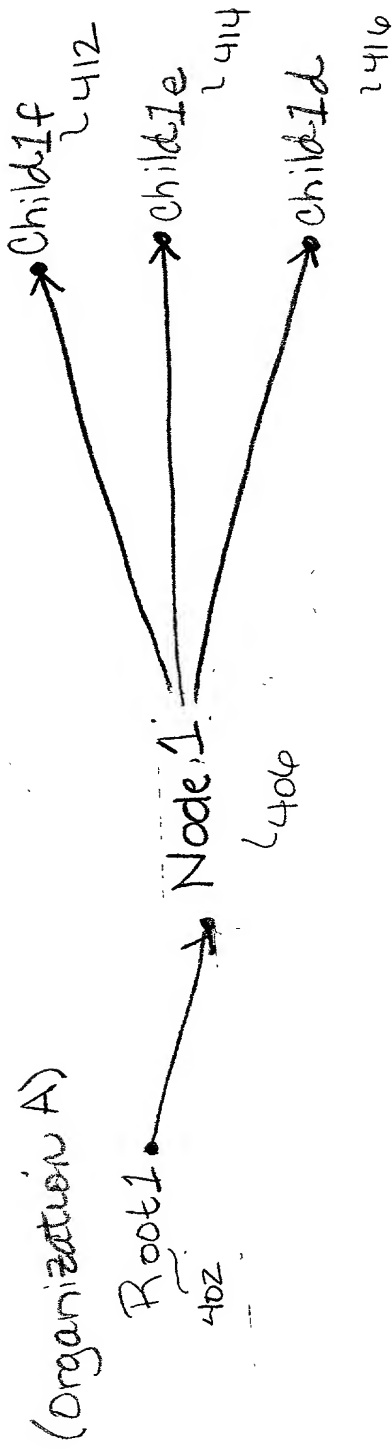


Fig. 12

200220" 64E6400T

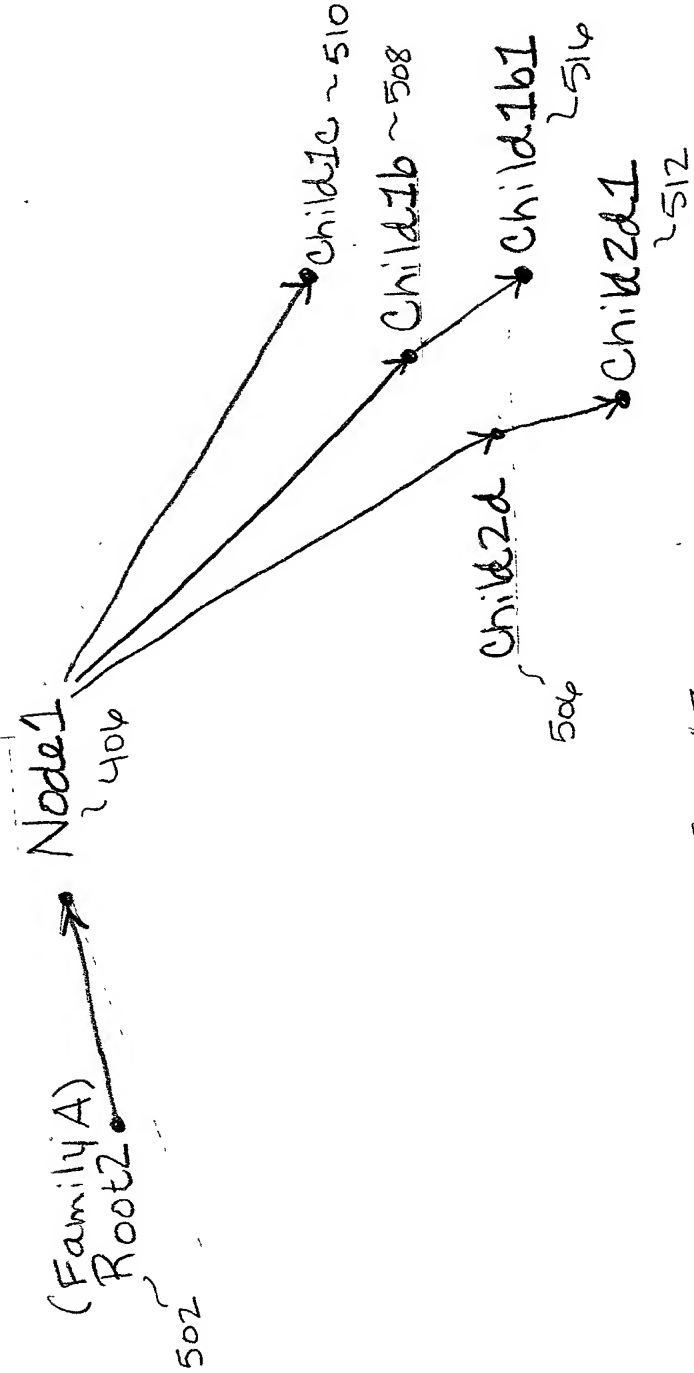


Fig. 13

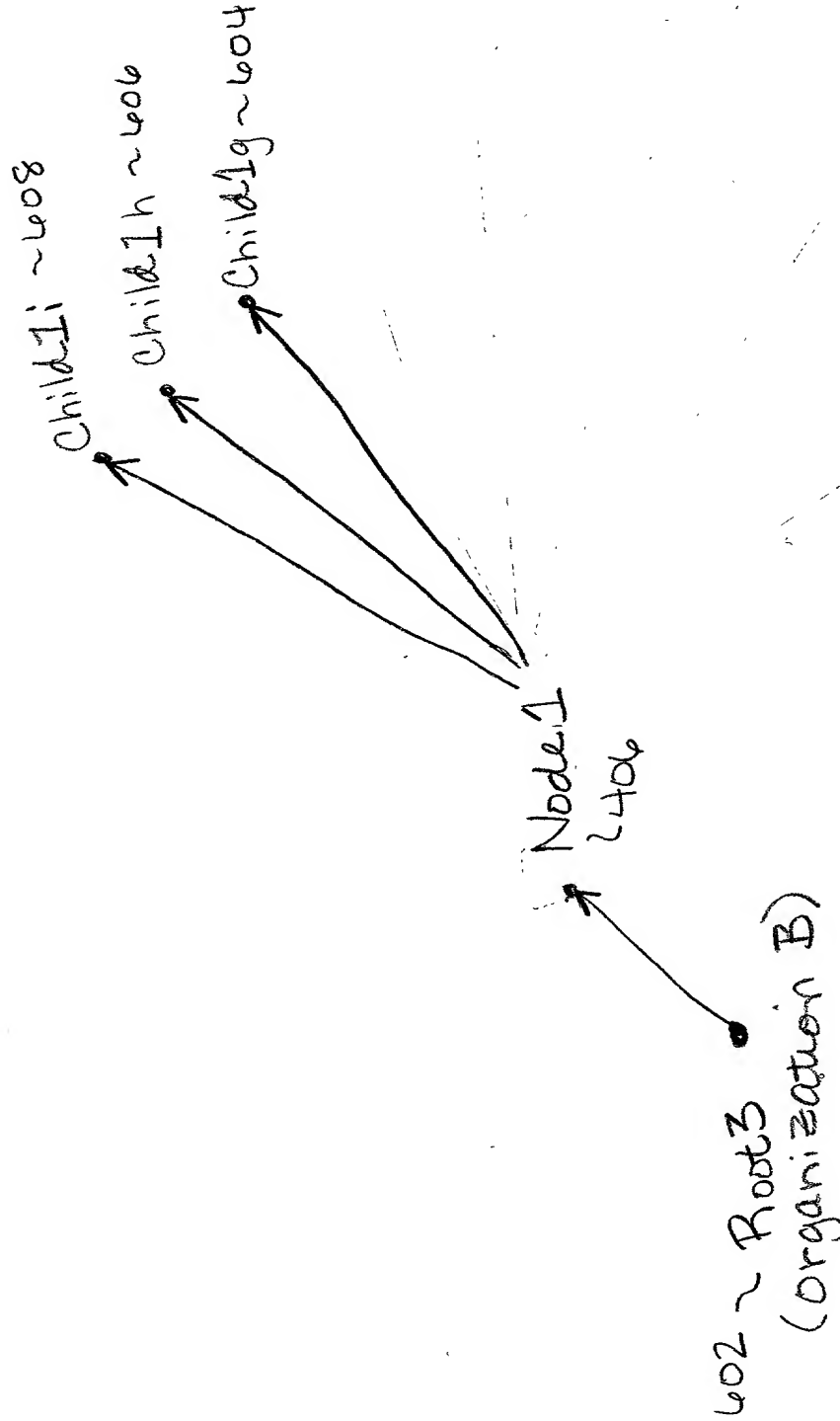


Fig. 14

515

Next view of hierarchy
navigation control set, if
double-clicked on Root2
or single-clicked
and select Bring to Focus
button for Root2.

Grouping "Organization Structure"

Details

Content Browsing

In Focus: Root2 ~ 502

Open

Add Children...

Move...

End...

Parents of "Root2"

Name	Hierarchy	Start Date	End Date
(Top of Grouping)			
1604			

Showing line 1 to 1 of 1

Bring to Focus

Change End Date...

Children of "Root2" >> "Top of Grouping"

Name	Hierarchy	Start Date	End Date
Node 1 ~ 404	Family A ~ 500	01/01/2000	Infinite
Node 2 ~ 404	Family A ~ 500	01/01/1999	12/31/2003
1606			

Showing line 1 to 2 of 2

Bring to Focus

Change End Date...

Fig. 16

Next: view of hierarchy
navigation control set, if
double-clicked on Focus1
or single-clicked
and select Bring to Focus
button for Focus1.

Name	Hierarchy	Start Date	End Date
Root1 ~ 40Z	Organization A ~ 400	01/01/2000	Infinite
Root2 ~ 50Z	Family A ~ 500	01/01/1999	12/31/2003
	<u>1604</u>		

showing line 1 to 3 of 3

Name	Hierarchy	Start Date	End Date
Child2d ~ 504	Family A / Organization A	01/01/2000	Infinite
Child1b ~ 508	Family A ~ 500	01/01/1999	12/31/2003
Child1c ~ 510	Family A ~ 500	08/01/1999	infinite
	<u>1604</u>		

showing line 1 to 3 of 3

Fig. 18

☒

Grouping "Organization Structure"

☐ ☐ ☐ ☐

Details | **Content Browsing**

In Focus: Child2d ~ 506

Name	Hierarchy	Start Date	End Date
Node1 ~ 406	Family A ~ 500	01/01/2000	Infinite
Node 2 ~ 404	Family ~ 500	01/01/1999	12/31/2003

showing line 1 to 2 of 12

Children of "Root 2" >> "Node1">> Child2d

Name	Hierarchy	Start Date	End Date
Child2d1 ~ 512	Family A ~ 500	01/08/2002	Infinite

showing line 1 to 1 of 1

200220" 64E6/00T

Attorney Docket No.:
First Inventor:
Title:

M-12213 US
Sherrill J. Packebush
System and Method For An Interface To Provide Visualization And
Navigation Of A Directed Graph

Fig. 19

Grouping "Organization Structure"

End

1902

Details

Content Browsing

In Focus: (Top of Grouping)

End

Move

Add Children

Open

Children of "Top of Grouping"

Name	Hierarchy	Start Date	End Date
Root1	Organization A	01/01/2000	Infinite
Root2	Family A	01/01/1999	12/31/2003
Root3	Organization B	08/01/1999	Infinite

Bring to Focus

Change End Date

L1502

Showing lines 1 to 3 of 3

200220" 54E5200T

2008

2002

2004

2010

2012

2014

201502

Grouping "Organization Structure"

Find in Grouping "Organization Structure"

Name contains Simpson

Apply Reset

Name 1 ID

Abe Simpson	48181112
Bart Simpson	11036599
Homer Simpson	88849290
Lisa Simpson	46380590
Maggie Simpson	33927804
Marge Simpson	10384539

Bring to Focus Cancel

Bring to Focus Change End Date...

Showing line 1 to 3 of 3

Fig. 20

Next view of hierarchy navigation control set, if double-clicked on Focus1 or single-clicked and select Bring to Focus button for Focus1.

Fig. 2b.

Grouping "Organization Structure"

Details

Content Browsing

Find

1902

In Focus: Focus1

Open

Add Children...

Move...

Find...

Name	Hierarchy	Start Date	End Date
Root1 ~ 402	Organization A ~ 400	01/01/2000	Infinite
Root2 ~ 502	Family A ~ 500	01/01/1999	12/31/2003
	1604		

Bring to Focus

Change End Date...

Children of "Root 2" >> "Focus1"

Name	Hierarchy	Start Date	End Date
Child2d ~ 506	Family A, Organization A	01/01/2000	Infinite
Child1b ~ 508	Family A ~ 500	01/01/1999	12/31/2003
Child1c ~ 510	Family A ~ 500	08/01/1999	Infinite
	1606		

Bring to Focus

Change End Date...

1502

1602

1604

1606

Showing line 1 to 3 of 3

2002220" 6466200T

2008

2002

View of hierarchy navigation control set, if selected Find button, so that the user can go directly to an object without navigating down the hierarchy.

Grouping "Organization Structure"

Find in Grouping "Organization Structure"

Name contains Simpson Apply Reset

2006 2004 2010

Name 1 ID

Abe Simpson	48181142
Bart Simpson	11036599
Homer Simpson	88849290
Lisa Simpson	46380590
Maggie Simpson	33927804
Marge Simpson	10384539

2110 Bring to Focus Cancel 2014

Children of "Root2" > "Node1"

Name	Hierarchy	Start date	End date
Child2d	Family A, Organization A	01/01/2000	infinite
Child1b	Family A	01/01/1999	12/31/2003
Child1c	Family A	08/01/1999	infinite

Bring to Focus Change End Date...

1502

2002

Fig. 22

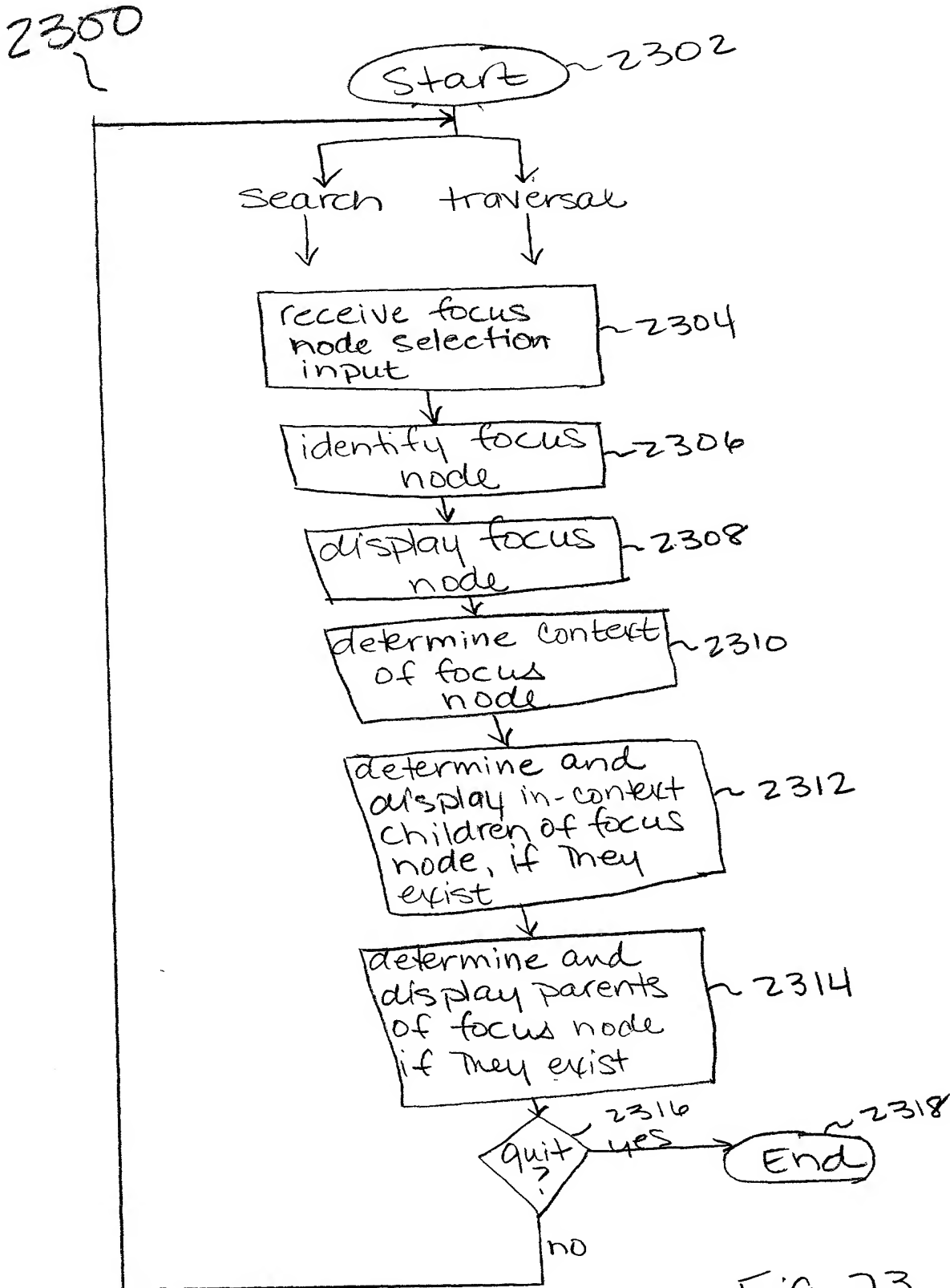


Fig. 23

2002220 64E6200T

☒

Grouping "Organization Structure"

☐ ☐ ☐ ☐ Find

Details Content Browsing

In Focus: Focus

Open Add Children... Move... Find...

1602

Node 1 ~ 406

Name	Hierarchy	Start Date	End Date
Root1 ~ 402	Organization A ~ 400	01/01/2000	infinite
Root2 ~ 502	Family A ~ 500	01/01/1999	12/31/2003

Bring to Focus Change End Date...

showing line 1 to 3 of 3

Children of "Root 2" > > "Focus"

Name	Hierarchy	Start Date	End Date
Child2a ~ 506	Family A, Organization A	01/01/2000	infinite
Child1b ~ 508	Family A ~ 500	01/01/1999	12/31/2003
Child1c ~ 510	Family A ~ 500	08/01/1999	infinite

Bring to Focus Change End Date...

1606

1502

showing line 1 to 3 of 3

Next view of hierarchy navigation control set, if double-clicked on Focus1 or single-clicked and select Bring to Focus button for Focus1.

Fig. 24

200220" 64E6Z00T

First Inventor:
Title:

Sherrill J. Packebush
System and Method For An Interface To Provide Visualization And
Navigation Of A Directed Graph

Fig. 25

Grouping "Organization Structure"

Details

Content Browsing

In Focus: Root1 ~402

Open

Add Children...

Move...

Find...

Name	Hierarchy	Start Date	End Date
(Top of Grouping)			
	1404		

Bring to Focus

Change End Date...

showing line 1 to 3 of 3

Children of 'Root 1'

Name	Hierarchy	Start Date	End Date
Focus1 Node1 ~406	Organization A ~400	01/08/2002	infinite
Focus2 Node2 ~404	Organization A ~400	01/10/2001	infinite

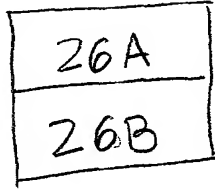
Bring to Focus

Change End Date...

showing line 1 to 3 of 3

1502

Fig. 26



2300 →

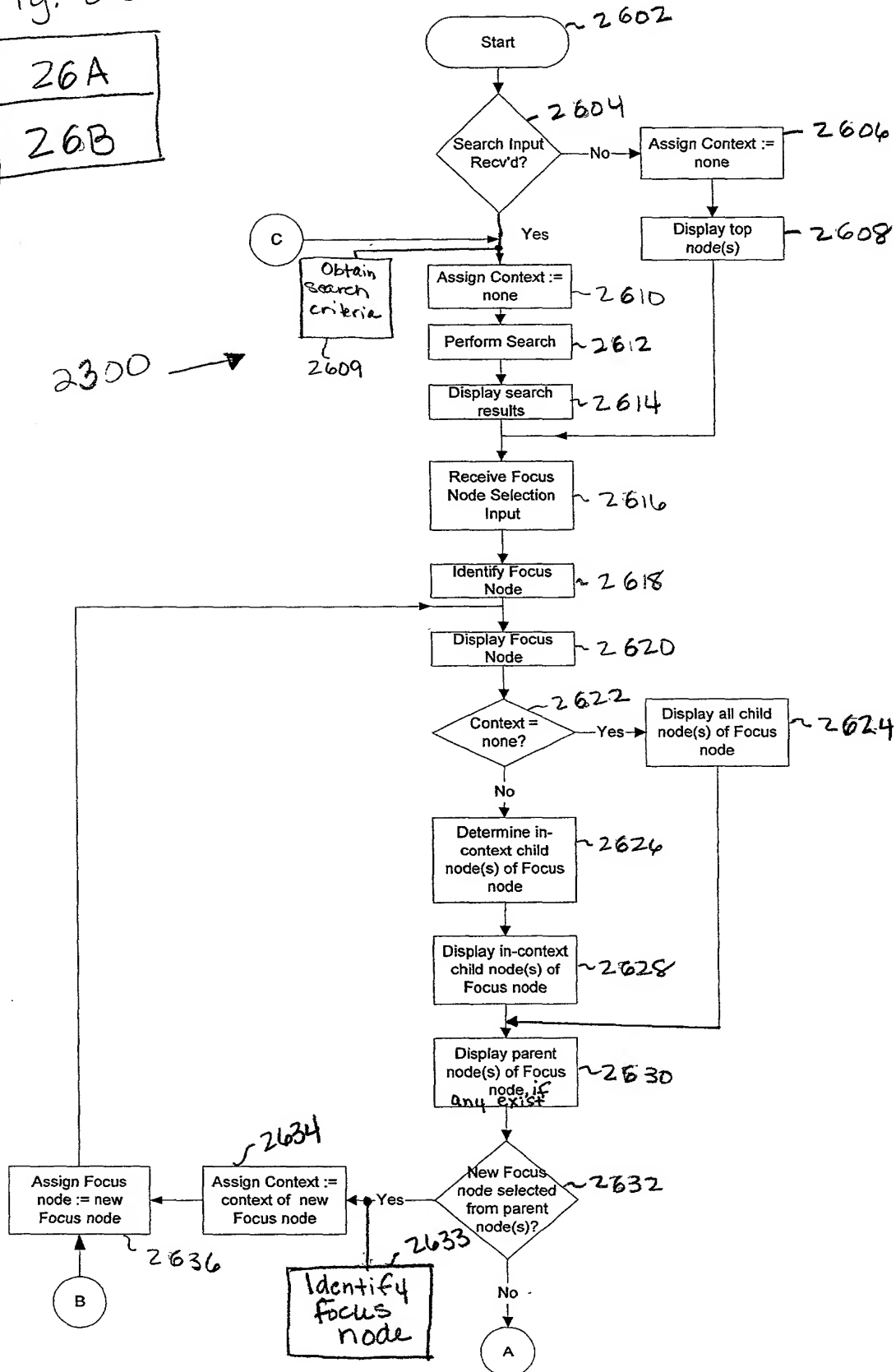


Fig. 26A

200220" 64E6/00T

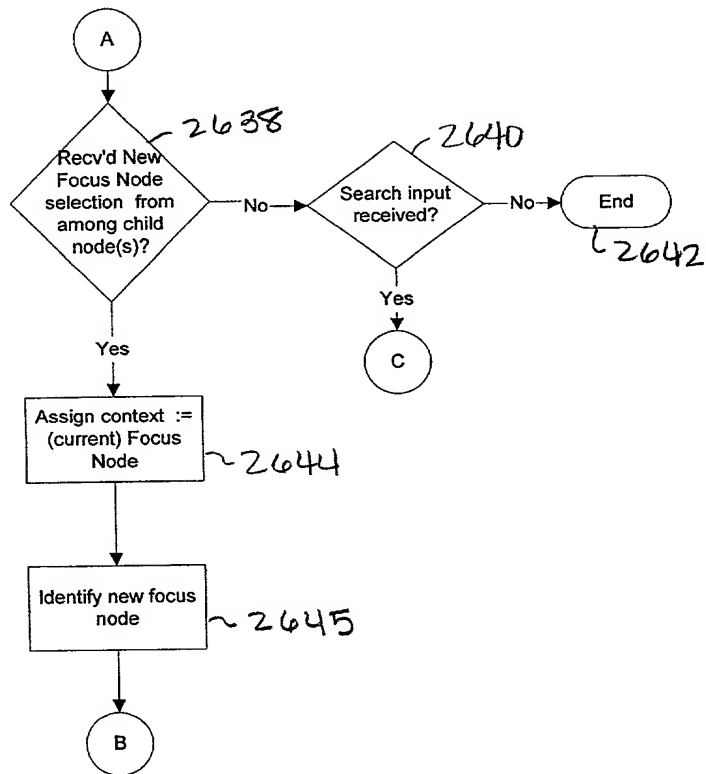


Fig. 26B

Search for Hierarchy

[Home](#)
[Parties](#)
[Hierarchies](#)
[Contracts](#)
[Agreements](#)
[Payments](#)
[Tools](#)
[Main](#)

[TRILLOGY DMS](#)

[Search for Hierarchy >>](#)

Hierarchy
 Type:

ID:
 Name:
 Must be agreement hierarchy? ☐ Yes

Contains Positions:
 Position Type:
 Agr/Rel ID:
 Linked positions: ☐ Yes

Contains Parties
 Party Name:
 Party ID:
 Start Date After:
 End Date Before:

sortresults by:

2010 2016

Search Results type: organization name contains Sample

ID	Name	Position	Party	Type	Description
001	Sample Hierarchy 1	CEO	Jane Michael Bean	org	
002	Sample Organizational Hierarchy 2	CEO	Ned Flanders	org	
003	Sample Organizational Hierarchy 3	CEO	Charles Norris	org	testing again
004	Sample Organizational Hierarchy 4	CEO	Harold Jones	org	
005	Sample Organizational Hierarchy 5	CEO	Buck Banzai	org	
006	Sample Organizational Hierarchy 6	CEO	Kris Decca	org	
007	Sample Organizational Hierarchy 7	CEO	Maggie Jones	org	
008	Sample Organizational Hierarchy 8	CEO	John Smith	org	
009	Sample Organizational Hierarchy 9	CEO	Sarah Pratt	org	

Displaying results 1-10 of 11 previous 10 | next 10

22110

Sample Organizational Hierarchy
 Name: Sample Organizational Hierarchy
 Description: Testing testing

Number of parties: 100
 Contains linked hierarchies: 2
 Hierarchies linking to this one: 3

2010 2016

View Hierarchy - linked items

Attorney Docket No.: M-12213 US
 First Inventor: Sherrill J. Packebush
 Title: System and Method For An Interface To Provide Visualization And Navigation Of A Directed Graph

200220" 54E6Z001

View Hierarchy - linked items

TRILogy DBMS Home Parties Hierarchies Contracts Agreements Payments Tools Maint Logout

>> View Sample Organizational Hierarchy

Display Options : view active parties only, view hierarchy as people

View hierarchy as of: 01/16/2001

change log

Michael Bean In Sample Organizational Hierarchy

00004 Michael Bean COO 01/01/1995 - 01/01/2002

View Party Record

Managers of Michael Bean

ID	Name	Title	Dept	Start Date	End Date	Hierarchy
00001	John Stalk	CEO		01/01/1995		Sample Organizational Hierarchy
11234	Jeremy Stalk	CEO		01/01/2001	12/31/2002	Intrepid Insurance

previous 5 | next 5

change log

Managed by Michael Bean in Sample Organizational Hierarchy

ID	Name	Title	Dept	Start Date	End Date	Hierarchy
00012	Jane Peas	Manager	Sales	01/01/1992		
00013	Jennifer Jane Stalk	Manager	Marketing	01/01/1993	01/01/2002	
00014	John Michael Bean	VP	Sales	01/01/1994	01/01/2002	East County Insurance
00015	Oz Heinz	VP	Marketing	01/01/1995		
00016	Annette Peas	Manager	R&D	01/01/1992		
00017	Jane Stalk	Manager	Benefits	01/01/1993	01/01/2002	
00018	Sweetboa Bean	Regional Manager	Sales	01/01/1994	01/01/2002	Whole County Insurance
00019	Garland Heinz	VP	Finance	01/01/1995		

previous 25 | next 25

change log

Displaying 1-25 of 40

1602

1604

1606

2802

2804

Fig. 28

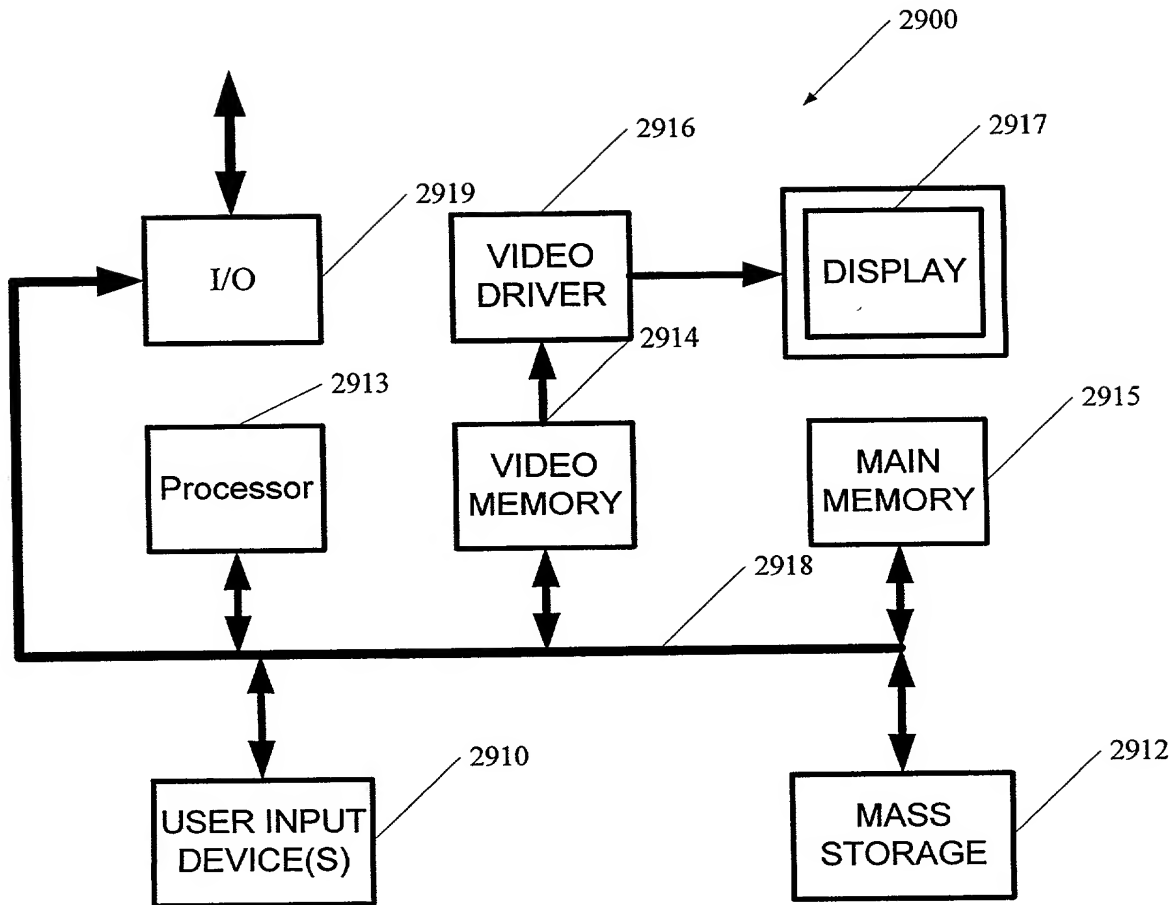
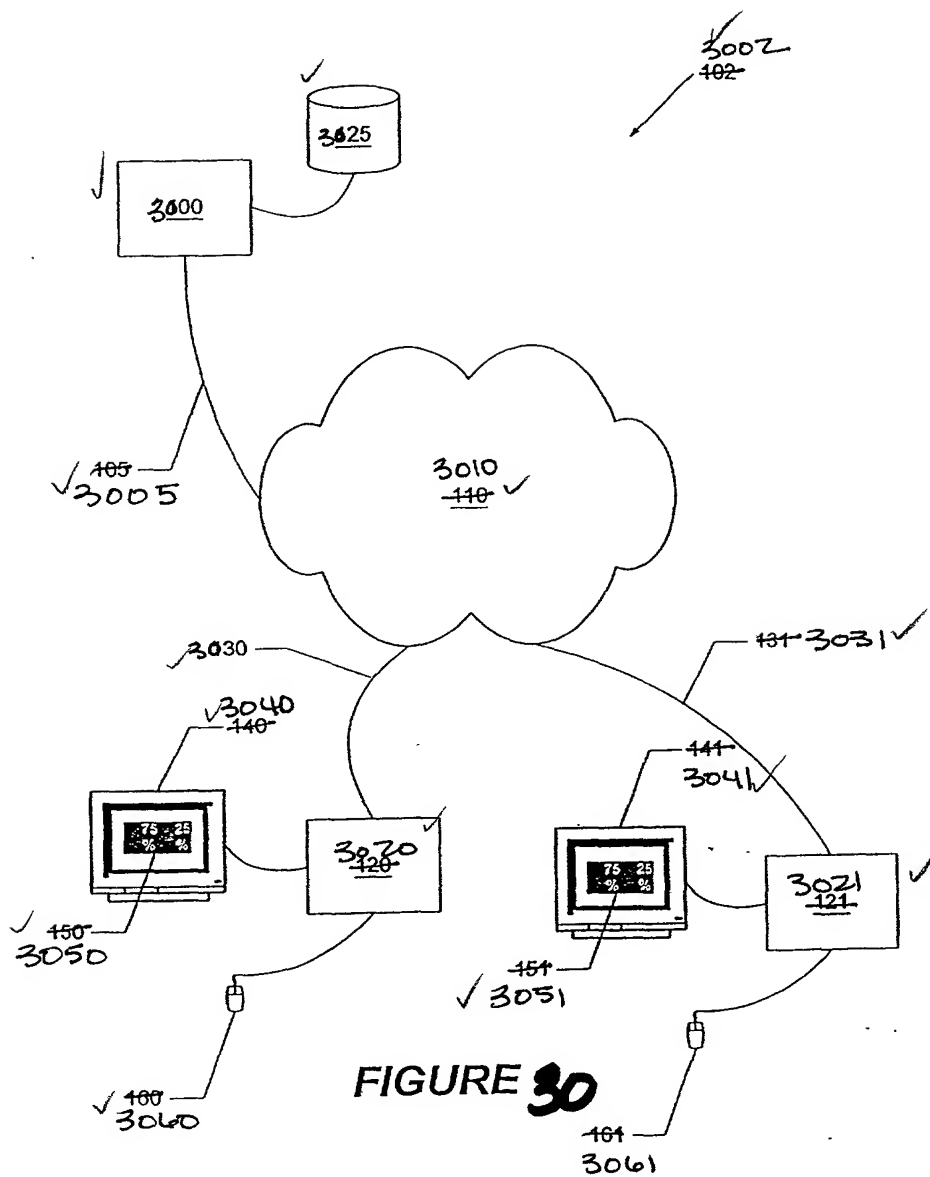


Figure 29



200220-6455007

Search for Hierarchy - Locate Party/Position

Attorney Docket No.:
First Inventor:
Title:

M-12213 US
Sherrill J. Packebush
System and Method For An Interface To Provide Visualization And
Navigation Of A Directed Graph

TRAC/DMS Home Parties Hierarchies Contracts Agreements Payments Tools Maint Logon

Search for Hierarchy >>

Hierarchy Type:

Must be agreement hierarchy? ☐ Yes ☐ No

Contains Positions:

Position Type:

AggrID:

Linked positions: ☐ Yes ☐ No

Contains Parties

Party Name:

Party ID:

Start Date After:

End Date Before:

sortresults by:

Search Results type: organization, name contains: sample

ID	Name	Position	Party	Type	Description
01	Sample Organizational Hierarchy 1	VP	Jane Michael Bean	org	Testing testing
01	Sample Organizational Hierarchy 1	COO	Michael Bean	org	testing again
01	Sample Organizational Hierarchy 1	Regional Manager	Morris Bean	org	
02	Intrepid Insurance	Manager	Norman Bean	org	
05	Sample Organizational Hierarchy 5	Clerk	Ople Bean	org	
05	Sample Organizational Hierarchy 5	Clerk	Paul Bean	org	
07	Sample Organizational Hierarchy 7	Clerk	Ross Bean	org	
07	Sample Organizational Hierarchy 7	Clerk	Sarah Bean	org	
07	Sample Organizational Hierarchy 7	Clerk	Tara Bean	org	
07	Sample Organizational Hierarchy 7	Clerk	Well Bean	org	

Displaying results 1-10 of 27 previous 10 | next 10

Profile Links to Linked by

Sample Organizational Hierarchy

Name	Description
Sample Organizational Hierarchy	Testing testing

Number of parties: 100
Contains linked hierarchies: 2
Hierarchies linking to this one: 3

Fig. 31

View Hierarchy - display options

TRIDGY.DWS Home Parties Hierarchies Contracts Agreements Payments Tools Main Logout

View hierarchy as of: 01/16/2001

Display Options

View hierarchy as: ☐ Titles ☒ People

3020a 3020b

Michael Bean In Sample Organizational Hierarchy

00004 Michael Bean COO 01/01/1995 - 01/01/2002

View Party Record

Managers of Michael Bean

ID	Name	Title	Dept	Start Date	End Date	Hierarchy
00001	Jack Soral	CEO		01/01/1995		Sample Organizational Hierarchy
11234	Jeremy Stalk	CEO		01/01/2001	12/31/2002	Intrepid Insurance

previous 5 | next 5

Managed by Michael Bean in Sample Organizational Hierarchy

ID	Name	Title	Dept	Start Date	End Date	Hierarchy
00012	Jane Peas	Manager	Sales	01/01/1992		
00013	Jennifer Jane Stalk	Manager	Marketing	01/01/1993	01/01/2002	
00014	Jane Michael Bean	VP	Sales	01/01/1994	01/01/2002	East County Insurance
00015	Oz Heinz	VP	Marketing	01/01/1995		
00016	Annette Peas	Manager	R&D	01/01/1992		
00017	Jane Stalk	Manager	Benefits	01/01/1993	01/01/2002	
00018	Sweetpea Bean	Regional Manager	Sales	01/01/1994	01/01/2002	Whole County Insurance
00019	Garland Heinz	VP	Finance	01/01/1995		

1404

1404

Fig. 32

View Hierarchy - view by Title

TRILGY DMS Home Parties Hierarchies Contracts Agreements Payments Tools Maint Logout

View hierarchy as of: 01/16/2001 Apply

Display Options : view active nodes only, view hierarchy as titles

COO position in Sample Organizational Hierarchy change log

ID	Name	Start Date	End Date	Hierarchy
00004	Michael Bean	01/01/1995	01/01/2002	Sample Organizational Hierarchy

Move this Person and their Group View Party Record

Managers of COO position change log

Title	ID	Name	Start Date	End Date	Hierarchy
CEO	00001	Jack Stalk	01/01/1995		Sample Organizational Hierarchy
CEO	11234	Jeremy Stalk	01/01/2001	12/31/2002	Intrepid Insurance

Displaying 1-2 of 2

Managed by COO position in Sample Organizational Hierarchy change log

Title	Ddept	ID	Name	Start Date	End Date	Hierarchy
Manager	Sales	00012	Jane Peas	01/01/1992		
Manager	Marketing	00013	Jennifer Jane Stalk	01/01/1993	01/01/2002	
VP	Sales	00014	Jane Michael Bean	01/01/1994	01/01/2002	East County Insurance
VP	Marketing	00015	Oz Heinz	01/01/1995		
Manager	R&D	00016	Annette Peas	01/01/1992		
Manager	Benefits	00017	Jane Stalk	01/01/1993	01/01/2002	
Regional Manager	Sales	00018	Sweetpea Bean	01/01/1994	01/01/2002	Whole County Insurance
VP	Finance	00019	Garland Heinz	01/01/1995		

Displaying 1-25 of 40

Fig. 33

200220 " 5466/007

Add Position/Party - step 1

Patent DMS Home Parties Hierarchies Contacts Agreements Payments Tools Main Logout

Add Position/Person

1. Add To

Hierarchy: Sample Organizational Hierarchy
Under: Michael Bean
Start Date:
End Date:

2. Position

Position Type:
Position Name:
Position Description:

3. Person

Use Placeholder: ☐ Yes
Party ID:
First Name: Daniel
Last Name: Bean

Save Cancel

Fig. 34a

Add Position/Party - step 2

TRILGY/DMS

Home Parties Hierarchies Contracts Agreements Payments Tools Maint Logout

Add Position/Person

1. Add To

Hierarchy Under

Sample Organizational Hierarchy

Michael Bean

Start Date

End Date

2. Position

Position Type

Position Name

Position Description

3. Person

Use Placeholder ☐ Yes

Party ID

First Name

Last Name

Please select the appropriate person from the following:

ID	Last Name	First Name	Organization	City
12314	Bean	Daniel	Trilogy	Austin
43142	Bean	Daniel	TrilBos	Boston
00021	Bean	Daniel	TrIDen	Denver

Fig. 34b

200220 " 64E6200T

Edit Position/Party

TECHNOLOGY DMS Home Parties Hierarchies Contracts Agreements Payments Tools Maint Logout

Edit Position/Person

Hierarchy	Sample Organizational Hierarchy		
Under	Michael Bean		
Edit effective as of	<input type="text" value="01/16/2001"/>	<input type="button" value="Calendar"/>	

1. Position

Type	<input type="text" value="VP"/>
Name	<input type="text" value="Vice President"/>
Department	<input type="text" value="Sales"/>
Description	<input type="text"/>

3. Person

☐ Use Placeholder ☐ Yes

Party ID	<input type="text"/>
First Name	<input type="text" value="Jane Michael"/>
Last Name	<input type="text" value="Bean"/>

Fig. 35

Retire Party

Attorney Docket No.:
First Inventor:
Title:

M-12213 US
Sherrill J. Packebush
System and Method For An Interface To Provide Visualization And
Navigation Of A Directed Graph

TRILGY DMS: Home Parties Hierarchies Contacts Agreements Payments Tools Maint Logout

Retire Position

Hierarchy: Sample Organizational Hierarchy
Under: Jack Sprat
Retire as of: 01/16/2001

1. Retire Person and Position

Name	Michael Bean
Position	VP, Sales
Description	

2. Subordinates affected (one level down only)

ID	Name	Title	Dept
00012	Jane Peas	Manager	Sales
00013	Jennifer Jane Stalk	Manager	Marketing
00015	Oz Heinz	VP	Marketing
00016	Annette Peas	Manager	R&D
00017	June Stalk	Manager	Benefits
00019	Garland Heinz	VP	Finance

Fig. 36

Move Subtree

TRLOGY DMS Home Parties Hierarchies Contracts Agreements Payments Tools Maint Logout

show Move Hierarchy

Filter: Party Status ☐ is ☐ Active ☐ Apply

Hierarchies as of: 01/16/2001 View hierarchies as: ☐ Titles ☐ People

Move Subtree

Type of Move ☐ Move ☐ Copy ☒ Insert as link

Start Date

End Date

▼ 1. Target Hierarchy

Type

Name

ID

▼ 2. Target Location

Position

Party ID

First Name

Last Name

► 3. Target Position

Move this Subtree

ID	Name	Title	Dept	Hierarchy
00004	Michael Bean			COO
Subordinates included in move				
00012	Jane Peas	Manager	Sales	
00013	Jennifer Jane Stalk	Manager	Marketing	
00014	Jane Michael Bean	VP	Sales	East County Insurance
00015	Oz Heinz	VP	Marketing	
00016	Annette Peas	Manager	R&D	
00017	June Stalk	Manager	Benefits	
00018	Sweetpea Bean	Regional Manager	Sales	Whole County Insurance
00019	Garland Heinz	VP	Finance	

(Move includes subordinates of subordinates.)

Fig. 37